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A CASE OF FATAL HÆMORRHAGE FROM THE THROAT.

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A CASE OF FATAL HÆMORRHAGE FROM THE THROAT.*

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A girl, aged 6 years, was admitted to hospital on October the 22nd, certified to be suffering from diphtheria. Beyond an attack of whooping-cough at the age of three years she had until recently been a healthy child, and there was no family history of bleeding. Five weeks before admission she had had measles, since when her voice had been husky. On October the 20th she complained of sore throat, and on the 22nd she had a croupy cough and the neck glands became swollen.

Condition on admission.—Deposit on both tonsils and uvula, slight nasal discharge, voice husky, stridor, croupy cough and dysphagia, Temperature 100° F. 16,000 units of diphtheria antitoxin given.

October the 23rd.—Deposit clearing away, leaving marked ulceration of tonsils and uvula. No fœtor. No Vincent's organisms found in the throat smear. Temperature 103° to 100° F.

October the 24th.—Dysphagia less. Temperature 102·4° to 99° F.

October the 25th.—At 9 a.m. she suddenly gave a cough and a huge gush of blood poured out of the mouth. Death preceded by marked cyanosis occurred within five minutes.

No diphtheria bacilli but only cocci were found in three successive cultures from the throat and one from the nose.

Necropsy: October the 26th.—Abscess cavities in both tonsils, ulceration of the uvula, soft palate, epiglottis, frænum epiglottidis, valleculæ, and ary-epiglottidean folds. Deep ulceration of laryngeal portion of pharynx exposing muscular tissue. Three small superficial ulcers above right vocal cord. The exact site of the bleeding vessel was

* Specimens of the case were shown at the Section for the Study of Disease in Children of the Royal Society of Medicine, on November the 22nd, 1912.

not determined, but there was no evidence of erosion of external carotid, internal carotid or internal jugular, nor of any glandular abscess.

Apart from its occurrence in connection with tracheotomy death from asphyxia caused by entrance of blood into the air-passages is so uncommon in children that the present case is one of unusual interest. A few cases of fatal hæmoptysis in young children from pulmonary tuberculosis or gangrene have been recorded (Meusnier, Magruder), but there was no evidence of either disease in the present case. Erosion of the neck vessels giving rise to fatal hæmorrhage is a very rare occurrence, and practically occurs in only two conditions—scarlet fever and gangrenous angina. In scarlet fever erosion of the external carotid has been recorded by Baader, Huber, Oppikofer, Griffiths and Riddell, of the lingual artery by Ghon and Oppikofer, and of the internal jugular vein by Henoch, and Griffiths and Riddell. Hecker has recently published a case in which, as in my own case, the bleeding vessel was not discovered, but the branches of the superior thyroid artery or the tributaries of the internal jugular vein were regarded as the probable source of the hæmorrhage.

Mr. A. R. Tweedy showed a specimen at the Laryngological Section of the Royal Society of Medicine on November the 1st, 1912, of ulceration of the internal carotid in a child, aged 1 year and 8 months, following a sore throat, which may possibly have been of scarlatinal origin, especially as the patient's brother had previously had some swollen submaxillary glands.

In cases of this kind the fatal hæmorrhage may occur spontaneously, as in the present case, or be due to opening a hæmatoma under the mistaken belief that it was a tonsillar or cervical abscess, as in cases reported by Huber and by Griffiths and Riddell. This mistake is all the more likely to be made as suppurative cervical adenitis may occur at any period of scarlet fever, and in some cases the erosion of the vessel is secondary to a cervical abscess or cellulitis.

There was no history or evidence of scarlet fever in my own case, but it is highly probable that the pharynx and larynx were predisposed to infection by the recent attack of measles, especially as the child's voice was still husky when the fatal illness began.

Death from pharyngeal hæmorrhage may also be one of the terminations of gangrenous angina, which may be either a primary condition or be secondary to other diseases besides scarlet fever. My own case, however, did not show the fœtor and prostration charac-

teristic of this disease, nor the clinical and bacteriological features of the closely allied condition, Vincent's angina.

It should rather be regarded as an instance of ulcerative sore throat to which the name pseudo-diphtheria is sometimes applied (Welch and Schamberg). This form of sore throat is usually due to streptococci, is often accompanied by laryngeal involvement, especially when it is secondary to measles, and frequently runs a severe course. Thus of thirty-five cases recently reported by Dr. Goodall twenty-five were fatal. In nine of his cases the larynx was involved, though the principal lesions, as in my case, were in the pharynx, and two had recently had measles. In none, however, was death due to sudden hæmorrhage from the throat. The bleeding vessel in the present case was not determined, and, as I was not present when it occurred, I am not prepared to say whether the hæmorrhage was venous or arterial. It is probable, however, that the laryngeal portion of the pharynx in which the ulceration is deepest was the site of the hæmorrhage.

Before making the post-mortem examination, I thought that death might have been due to erosion of the internal or external carotid or internal jugular. These vessels, however, were found to be intact. The internal organs, moreover, were not blanched as in death due to hæmorrhage, but engorged, and the blood in the bronchi and lungs, the acute vesicular emphysema and distended right heart showed that death had been due to asphyxia. Further, after opening of a large vessel, death usually occurs within a minute, whereas in death from asphyxia due to erosion of a smaller vessel, the agony is more protracted.

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